

ABSTRACT OF THE DISCLOSURE

The present invention generally provides a reduced downtime maintenance apparatus and method for replacing and/or repairing a subassembly in sealing equipment for oil field use. The invention allows the removal of rotating portions of a rotary drilling head without having to remove non-rotating portions. The reduction in weight and size allows a more efficient repair and/or replacement of a principal wear component such as a packer. Specifically, the packer in a rotary drilling head can be removed independent of bearings and other portions of the rotary drilling head. Furthermore, because of the relatively small size and light weight, the packer can be removed typically without having to use a crane to lift a rotary BOP and without disassembling portions of the drilling platform. In some embodiments, the packer can be removed with the drill pipe without additional equipment. Furthermore, the packer can be removed remotely without necessitating manual disengagement typically needed below the platform. The invention also provides a fluid actuated system to maintain a pre-load system on the bearing.